United States Patent [19]

Maloney et al.

[11] **Patent Number: 4,865,552**

[45] **Date of Patent: * Sep. 12, 1989**

[54] **OPHTHALMOLOGIC PHANTOM SYSTEM**

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[*] Notice: The portion of the term of this patent subsequent to Aug. 9, 2005 has been disclaimed.

[21] Appl. No.: **100,168**

[22] Filed: **Sep. 23, 1987**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 14,434, Feb. 13, 1987, Pat. No. 4,762,496.

[51] **Int. Cl.**[4] **G09B 23/28**

[52] **U.S. Cl.** **434/271**; 623/4

[58] **Field of Search** 434/270, 271; 623/4–6

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[57] **ABSTRACT**

A simulated human ocular system for practicing the surgical techniques required for the removal of cataractous lenses utilizing posterior chamber lens emulsification and, optionally, the techniques required from small incision implantation and refractive surgery is provided. A human eye is generally imitated by an outer orb having three inner, connected chambers separated by membranes that correspond to the cornea, the iris, and the posterior chamber membrane. A lens phantom is releasably attached to the orb within the chamber located between the iris and the posterior chamber membrane. The lens phantom consists of a structured, water-sensitive composition, such as a cross-linked gelatin to which a water soluble polymer has been added, and is thereafter encapsulated within a transparent vinyl or vinylidene chloride copolymer film. Placement of the ocular system in a structure that duplicates the outside features of a human head, with provisions for varying the rotation and degree of ocular projection, completes this ocular model.

13 Claims, 3 Drawing Sheets